

## Refine Search

### Search Results -

Term	Documents
PRRP	64
PRRPS	3
(19 AND PRRP).PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	2
(L19 AND PRRP ).PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	2

Database:

US Pre-Grant Publication Full-Text Database  
 US Patents Full-Text Database  
 US OCR Full-Text Database  
 EPO Abstracts Database  
 JPO Abstracts Database  
 Derwent World Patents Index  
 IBM Technical Disclosure Bulletins

Search:

L20

Refine Search

Recall Text

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### Search History

DATE: Monday, January 12, 2004   [Printable Copy](#)   [Create Case](#)

<u>Set</u> <u>Name</u>	<u>Query</u>	<u>Hit</u> <u>Count</u>	<u>Set</u> <u>Name</u> result set
side by side			
<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=ADJ</i>			
<u>L20</u>	L19 and prrp	2	<u>L20</u>
<u>L19</u>	hinuma.in.	409	<u>L19</u>
<u>L18</u>	L17 and prrp	0	<u>L18</u>
<u>L17</u>	ibaraki.in.	2207	<u>L17</u>
<u>L16</u>	ibaraki-shji-hinuma.in.	0	<u>L16</u>
<u>L15</u>	L14 and prrp	2	<u>L15</u>
<u>L14</u>	kitada.in.	3372	<u>L14</u>
<u>L13</u>	kitada-osaka.in.	0	<u>L13</u>
<u>L12</u>	kitada-chieko-osaka.in.	0	<u>L12</u>

<u>L11</u>	osaka-chieko-kitada.in.	0	<u>L11</u>
<u>L10</u>	L9 and prrp	1	<u>L10</u>
<u>L9</u>	matsumoto-hirokazu.in.	79	<u>L9</u>
<u>L8</u>	matsumoto-ibaraki-hirokazu.in.	0	<u>L8</u>
<u>L7</u>	ibaraki-hirokazu-matsumoto.in.	0	<u>L7</u>
<u>L6</u>	l3 and g protein coupled receptor	13	<u>L6</u>
<u>L5</u>	l3 and (uterine inertia or atonic hemorrhage or placental expulsion or subinvolution, or cesarean section or induced abortion or lacteal retention)	0	<u>L5</u>
<u>L4</u>	L3 and l2	13	<u>L4</u>
<u>L3</u>	prrp	65	<u>L3</u>
<u>L2</u>	prolactin releasing peptide or prolactin-releasing peptide	28	<u>L2</u>
<u>L1</u>	oxytocin secretion regulator	2	<u>L1</u>

END OF SEARCH HISTORY

\*\*\*\*\*STN Columbus\*\*\*\*\*

=> d 18 ibib abs 1-13

FILE 'MEDLINE'  
FILE 'JAPIO'  
FILE 'BIOSIS'  
FILE 'SCISEARCH'  
FILE 'WPIDS'  
FILE 'CAPLUS'  
FILE 'EMBASE'  
=> s oxytocin secretion regulator#  
L1 2 OXYTOCIN SECRETION REGULATOR#

=> s oxytocin secretion stimulator##  
L2 0 OXYTOCIN SECRETION STIMULATOR##

=> s oxytocin secretion stimulator#  
L3 0 OXYTOCIN SECRETION STIMULATOR#

=> s prolactin releasing peptide# or prolactin-releasing peptide#  
L4 529 PROLACTIN-RELEASING PEPTIDE# OR  
PROLACTIN-RELEASING PEPTIDE#

=> s prtp  
L5 480 PRRP

=> s 15 and oxytocin#  
L6 33 L5 AND OXYTOCIN#

=> s 14 and oxytocin#  
L7 40 L4 AND OXYTOCIN#

=> dup rem l6  
PROCESSING COMPLETED FOR L6  
L8 13 DUP REM L6 (20 DUPLICATES REMOVED)

=> dup rem l7  
PROCESSING COMPLETED FOR L7  
L9 18 DUP REM L7 (22 DUPLICATES REMOVED)

=> s 17 and g protein coupled receptor#  
5 FILES SEARCHED...  
L10 3 L7 AND G PROTEIN COUPLED RECEPTOR#

=> s 18 and g protein coupled receptor#  
5 FILES SEARCHED...  
L11 1 L8 AND G PROTEIN COUPLED RECEPTOR#

=> s 19 and g protein coupled receptor#  
5 FILES SEARCHED...  
L12 2 L9 AND G PROTEIN COUPLED RECEPTOR#

=> d 111

L11 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 2001:350675 CAPLUS  
DN 134:336289  
TI Prolactin-releasing peptide  
AU Hinuma, Shuji  
CS Discovery Res. Lab. I, Pharm. Discovery Res. Div., Takeda Chem.  
Ind.,  
Ltd., Japan  
SO Horumon to Rinsho (2001), 49(4), 377-385  
CODEN: HORJAE; ISSN: 0045-7167  
PB Igaku no Sekaisha  
DT Journal; General Review  
LA Japanese

=> d 112

L12 ANSWER 1 OF 2 SCISEARCH COPYRIGHT 2004 THOMSON  
ISI on STN  
AN 2001:765552 SCISEARCH  
GA The Genuine Article (R) Number: 473DK  
TI The metastasis suppressor gene KiSS-1 encodes kisspeptins, the  
natural  
ligands of the orphan \*\*\*G\*\*\* protein\*\*\* - \*\*\*coupled\*\*\*  
\*\*\*receptor\*\*\* GPR54  
AU Kotani M; Dethieux M; Vandenbogaerde A; Communi D;  
Vanderwinden J M; Le  
Poul E; Brezillon S; Tyldesley R; Suarez-Huerta N; Vandeput F;  
Blanpain C;  
Schiffmann S N; Vassart G; Parmentier M (Reprint)  
CS Free Univ Brussels, IRIBHN, Campus Erasme, Route Lennik 808,  
B-1070  
Brussels, Belgium (Reprint); Free Univ Brussels, IRIBHN, B-1070  
Brussels,  
Belgium; Free Univ Brussels, Gen Med Serv, B-1070 Brussels,  
Belgium;  
Euroscreen SA, B-1070 Brussels, Belgium; Micromass Ltd, Manchester  
M23  
9LZ, Lancs, England; Free Univ Brussels, Neurophysiol Lab, B-1070  
Brussels, Belgium  
CYA Belgium; England  
SO JOURNAL OF BIOLOGICAL CHEMISTRY, (14 SEP 2001) Vol.  
276, No. 37, pp.  
34631-34636.  
Publisher: AMER SOC BIOCHEMISTRY MOLECULAR BIOLOGY  
INC, 9650 ROCKVILLE  
PIKE, BETHESDA, MD 20814 USA.  
ISSN: 0021-9258.  
DT Article; Journal  
LA English  
REC Reference Count: 23  
\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL  
FORMATS\*

L8 ANSWER 1 OF 13 MEDLINE on STN DUPLICATE 1  
ACCESSION NUMBER: 2003211625 MEDLINE  
DOCUMENT NUMBER: 22618248 PubMed ID: 12732249  
TITLE: Facilitative role of prolactin-releasing peptide neurons in  
\*\*\*oxytocin\*\*\* cell activation after conditioned-fear  
stimuli.  
AUTHOR: Zhu L L; Onaka T  
CORPORATE SOURCE: Department of Physiology, Jichi Medical  
School,  
Minamikawachi-machi, Tochigi-ken 329-0498, Japan.  
SOURCE: NEUROSCIENCE, (2003) 118 (4) 1045-53.  
Journal code: 7605074. ISSN: 0306-4522.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 200307  
ENTRY DATE: Entered STN: 20030507  
Last Updated on STN: 20030713  
Entered Medline: 20030711  
AB Emotional stress activates \*\*\*oxytocin\*\*\* neurons in the  
hypothalamic  
supraoptic and paraventricular nuclei and stimulates \*\*\*oxytocin\*\*\*  
release from the posterior pituitary. \*\*\*Oxytocin\*\*\* neurons in the  
hypothalamus have synaptic contact with prolactin-releasing peptide (  
\*\*\*PrRP\*\*\* ) neurons. Intracerebroventricular administration of  
\*\*\*PrRP\*\*\* stimulates \*\*\*oxytocin\*\*\* release from the pituitary.  
These observations raise the possibility that \*\*\*PrRP\*\*\* neurons  
play  
a role in \*\*\*oxytocin\*\*\* response to emotional stress. To test this  
hypothesis, we first examined expression of Fos protein, an immediate  
early gene product, in the \*\*\*PrRP\*\*\* neurons in the medulla  
oblongata  
after conditioned-fear stimuli. Conditioned-fear stimuli increased the  
number of \*\*\*PrRP\*\*\* cells expressing Fos protein especially in the  
dorsomedial medulla. In order to determine whether \*\*\*PrRP\*\*\*  
cells  
projecting to the supraoptic nucleus are activated after conditioned-fear  
stimuli, we injected retrograde tracers into the supraoptic nucleus.  
Conditioned-fear stimuli induced expression of Fos protein in  
retrogradely  
labeled \*\*\*PrRP\*\*\* cells in the dorsomedial medulla. Finally we  
investigated whether immunoneutralization of endogenous  
\*\*\*PrRP\*\*\*  
impairs \*\*\*oxytocin\*\*\* release after emotional stimuli. An i.c.v.  
injection of a mouse monoclonal anti- \*\*\*PrRP\*\*\* antibody impaired  
release of \*\*\*oxytocin\*\*\* but not of adrenocorticotrophic hormone  
or  
prolactin and did not significantly change freezing behavior in response  
to conditioned-fear stimuli. From these data, we conclude that  
\*\*\*PrRP\*\*\* neurons in the dorsomedial medulla that project to the  
hypothalamus play a facilitative role in \*\*\*oxytocin\*\*\* release after  
emotional stimuli in rats.

L8 ANSWER 2 OF 13 MEDLINE on STN DUPLICATE 2  
ACCESSION NUMBER: 2003207466 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 12668869  
TITLE: Prolactin-releasing peptide and its homolog RFRP-1 act in  
hypothalamus but not in anterior pituitary gland to  
stimulate stress hormone secretion.  
AUTHOR: Samson Willis K; Keown Cynthia; Samson Charles K;  
Samson  
Henry W; Lane Brian; Baker Jennifer R; Taylor Meghan M  
CORPORATE SOURCE: Department of Pharmacological and  
Physiological Science,  
Saint Louis University School of Medicine, St Louis, MO  
63104, USA.. samsonwk@slu.edu  
CONTRACT NUMBER: 1 R01 HL50287 (NHLBI)  
SOURCE: Endocrine, (2003 Feb-Mar) 20 (1-2) 59-66.  
Journal code: 9434444. ISSN: 0969-711X.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 200312  
ENTRY DATE: Entered STN: 20030506  
Last Updated on STN: 20031217  
Entered Medline: 20031203  
AB The RF-amide peptides (RFRPs), including prolactin (PRL)-releasing  
peptide-31 ( \*\*\*PrRP\*\*\* -31) and RFRP-1, have been reported to  
stimulate  
stress hormone secretion by either direct pituitary or indirect  
hypothalamic actions. We examined the possible direct effects of these  
peptides on PRL and adrenocorticotropin (adrenocorticotrophic  
hormone  
[ACTH]) release from dispersed anterior pituitary cells in culture and  
on  
PRL and ACTH secretion following intracerebroventricular (i.c.v.)  
administration in vivo. Neither peptide significantly altered PRL or  
ACTH  
release from cultured pituitary cells (male rat donors). Central  
administration of 1.0 and 3.0 nmol of \*\*\*PrRP\*\*\* -31, but only the  
higher dose of RFRP-1, significantly elevated serum corticosterone  
levels  
in conscious male rats. The effect of \*\*\*PrRP\*\*\* -31 was not  
blocked  
by pretreatment (i.v.) with the corticotropin-releasing hormone (CRH)  
antagonist, alpha-helical CRH 9-41; however, pretreatment of the  
animals  
(i.v.) with an antiserum to CRH significantly lowered the  
hypothalamic-pituitary-adrenal axis response to central administration  
of  
\*\*\*PrRP\*\*\* -31. On the other hand, the release of PRL was  
significantly  
elevated by 3.0 nmol of RFRP-1, but not \*\*\*PrRP\*\*\* -31, in

similarly  
treated, conscious male rats. Pretreatment with the catecholamine  
synthesis inhibitor, alpha-methyl-para-tyrosine, prevented the  
stimulation  
of PRL secretion observed following central administration of RFRP-1.  
RFRP-1 similarly did not alter PRL secretion in rats pretreated with the  
dopamine, D(2) receptor blocker, domperidone. These results suggest  
that  
the RF-amide peptides are not true neuroendocrine regulators of stress  
hormone secretion in the rat but, instead, act centrally to alter the  
release of neuroendocrine factors that do act in the pituitary gland to  
control PRL and ACTH release. In the case of RFRP-1, stimulation of  
PRL  
secretion is potentially owing to an action of the peptide to inhibit  
dopamine release into the median eminence. The corticosterone  
secretion  
observed following central administration of \*\*\*PrRP\*\*\* -31 does  
not  
appear, based on our current results, to be solely owing to an action of  
the peptide on CRH-producing neurons but, instead, may be a result of  
the  
ability of \*\*\*PrRP\*\*\* -31 to increase as well the exposure of the  
corticotrophs in vivo to other ACTH secretagogues, such as  
\*\*\*oxytocin\*\*\* or vasopressin.

L8 ANSWER 3 OF 13 SCISEARCH COPYRIGHT 2004 THOMSON  
ISI on STN  
ACCESSION NUMBER: 2002:89108 SCISEARCH  
THE GENUINE ARTICLE: 514KA  
TITLE: PRL-releasing peptide reduces food intake and may  
mediate  
satiety signaling  
AUTHOR: Lawrence C B; Ellacott K L J; Luckman S M (Reprint)  
CORPORATE SOURCE: Univ Manchester, Sch Biol Sci, 1-124  
Stopford Bldg, Oxford  
Rd, Manchester M13 9PT, Lancs, England (Reprint); Univ  
Manchester, Sch Biol Sci, Manchester M13 9PT, Lancs,  
England  
COUNTRY OF AUTHOR: England  
SOURCE: ENDOCRINOLOGY, (FEB 2002) Vol. 143, No. 2,  
pp. 360-367.  
Publisher: ENDOCRINE SOC, 4350 EAST WEST  
HIGHWAY SUITE  
500, BETHESDA, MD 20814-4110 USA.  
ISSN: 0013-7227.  
DOCUMENT TYPE: Article; Journal  
LANGUAGE: English  
REFERENCE COUNT: 42  
\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL  
FORMATS\*  
AB PRL-releasing peptide ( \*\*\*PrRP\*\*\* ) administered centrally  
inhibits  
food intake and body weight gain. To elucidate the role of  
\*\*\*PrRP\*\*\* ,  
its actions were compared with those of a homeostatic regulator of food  
intake, the satiety factor, cholecystikinin (CCK), and a nonhomeostatic  
regulator, lithium chloride (LiCl), which reduces food intake due to  
visceral illness. Immunohistochemical analysis of the protein product of  
the c-fos gene, showed that central administration of \*\*\*PrRP\*\*\*  
activated some areas of the brain in common with both CCK and LiCl  
administered peripherally. However, \*\*\*PrRP\*\*\* was more similar  
to CCK  
than to LiCl in its behavioral effects. \*\*\*PrRP\*\*\* did not cause  
conditioned taste aversion, but instead enhanced the normal behavioral  
satiety sequence. Furthermore, brainstem \*\*\*PrRP\*\*\* neurons were  
strongly activated by CCK, but not by LiCl. These data provide  
evidence  
that pathways from the gut to the brain that are involved in signaling  
satiety and visceral illness may have some independent components and  
suggest that \*\*\*PrRP\*\*\* may mediate some of the central satiating  
actions of CCK.

L8 ANSWER 4 OF 13 SCISEARCH COPYRIGHT 2004 THOMSON  
ISI on STN  
ACCESSION NUMBER: 2001:888742 SCISEARCH  
THE GENUINE ARTICLE: 487WT  
TITLE: Sleep-promoting activity of prolactin-releasing peptide (  
\*\*\*PrRP\*\*\* ) in the rat  
AUTHOR: Zhang S Q; Inoue S; Kimura M (Reprint)  
CORPORATE SOURCE: Tokyo Med & Dent Univ, Inst Biomater &  
Bioengin, Dept  
Biocybernet, Chiyoda Ku, 2-3-10 Kanda Surugadai, Tokyo  
1010062, Japan (Reprint); Tokyo Med & Dent Univ, Inst  
Biomater & Bioengin, Dept Biocybernet, Chiyoda Ku, Tokyo  
1010062, Japan  
COUNTRY OF AUTHOR: Japan  
SOURCE: NEUROREPORT, (29 OCT 2001) Vol. 12, No. 15,  
pp. 3173-3176.  
Publisher: LIPPINCOTT WILLIAMS & WILKINS, 530  
WALNUT ST,  
PHILADELPHIA, PA 19106-3621 USA.  
ISSN: 0959-4965.  
DOCUMENT TYPE: Article; Journal  
LANGUAGE: English  
REFERENCE COUNT: 25  
\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL  
FORMATS\*  
AB The present study examines whether or not prolactin-releasing  
peptide (  
\*\*\*PrRP\*\*\* ) infused intracerebroventricularly (i.c.v.) affects sleep  
and  
the release of prolactin (PRL) and growth hormone (GH) in rats. At a  
dose  
of 0.1 nmol, \*\*\*PrRP\*\*\* promoted rapid-eye-movement (REM)  
sleep,  
whereas 1.0 nmol increased both non-REM and REM sleep and 10.0  
nmol  
enhanced only non-REM sleep. During the i.c.v. infusion of

\*\*\*PrRP\*\*\* with 0.1 nmol, levels of plasma PRL were elevated, but GH levels were significantly decreased. Since it is reported that \*\*\*PrRP\*\*\* fails to induce PRL release from the male pituitary, the stimulatory effects of \*\*\*PrRP\*\*\* on PRL release observed here seem to be indirect.

However, PRL stimulated by i.c.v-infused \*\*\*PrRP\*\*\* could take part in the REM sleep-promoting activity of \*\*\*PrRP\*\*\*. NeuroReport 12:3173-3176 (C) 2001 Lippincott Williams & Wilkins.

L8 ANSWER 5 OF 13 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN  
ACCESSION NUMBER: 2001:375148 SCISEARCH  
THE GENUINE ARTICLE: 427YN  
TITLE: Prolactin-releasing peptide as a novel stress mediator in the central nervous system  
AUTHOR: Maruyama M; Matsumoto H; Fujiwara K; Noguchi J; Kitada C; Fujino M; Inoue K (Reprint)  
CORPORATE SOURCE: Saitama Univ, Fac Sci, Dept Regulat Biol, 255 Shimo Ohkubo, Urawa, Saitama 3380825, Japan (Reprint); Saitama Univ, Fac Sci, Dept Regulat Biol, Urawa, Saitama 3380825, Japan; Takeda Chem Ind Co Ltd, Pharmaceut Discovery Res Div, Discovery Res Labs, Tsukuba, Ibaraki 3004293, Japan  
COUNTRY OF AUTHOR: Japan  
SOURCE: ENDOCRINOLOGY, (MAY 2001) Vol. 142, No. 5, pp. 2032-2038.  
Publisher: ENDOCRINE SOC, 4350 EAST WEST HIGHWAY SUITE 500, BETHESDA, MD 20814-4110 USA.  
ISSN: 0013-7227.  
DOCUMENT TYPE: Article; Journal  
LANGUAGE: English  
REFERENCE COUNT: 34  
\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS\*

AB A1/A2 noradrenergic neurons in the medulla oblongata are well known to mediate stress signals in the central nervous system. Stress activates A1/A2 noradrenergic neurons, and then noradrenaline (NA) stimulates secretion through hypothalamic CRH. On the other hand, PRL-releasing peptide (\*\*\*PrRP\*\*\*) was recently isolated and was found to be produced by some A1/A2 neurons and the dorsomedial hypothalamic nucleus. We previously demonstrated that \*\*\*PrRP\*\*\* neurons make synapse-like contact with hypothalamic CRH neurons. In fact, we demonstrated that the central administration of \*\*\*PrRP\*\*\* stimulates CRH-mediated ACTH secretion. Furthermore, it has been reported that \*\*\*PrRP\*\*\* neurons in A1/A2 cell groups are colocalized with tyrosine hydroxylase (TH), which is known as the marker enzyme of catecholaminergic neurons. These data strongly suggest that \*\*\*PrRP\*\*\* is related to stress-responsive signal transduction, and \*\*\*PrRP\*\*\* and NA cooperatively modulate the hypothalamo-pituitary-adrenal axis. We therefore examined the effect of water immersion-restraint stress on c-Fos protein accumulation in \*\*\*PrRP\*\*\* - and TH-immunoreactive neurons. The synergistic effects of \*\*\*PrRP\*\*\* and NA on plasma ACTH elevation were also examined. The results clearly showed that c-Fos protein accumulation dramatically increased in the nuclei of A1/A2 and dorsomedial hypothalamic nucleus \*\*\*PrRP\*\*\* neurons. In addition, it was revealed that c-Fos protein was specifically expressed in the \*\*\*PrRP\*\*\* /TH double positive cells in the A1/A2 cell groups. We also demonstrated that the central administration of \*\*\*PrRP\*\*\* and NA in combination at subactive (noneffective) doses clearly induced plasma ACTH elevation. Here we report that \*\*\*PrRP\*\*\* is a novel and important mediator of the hypothalamo-pituitary-adrenal axis for the stress response.

L8 ANSWER 6 OF 13 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN  
ACCESSION NUMBER: 2001:760515 SCISEARCH  
THE GENUINE ARTICLE: 474CQ  
TITLE: The prolactin releasing peptides: RF-amide peptides  
AUTHOR: Taylor M M; Samson W K (Reprint)  
CORPORATE SOURCE: St Louis Univ, Sch Med, Dept Pharmacol & Physiol Sci, 1402 S Grand Blvd, St Louis, MO 63104 USA (Reprint); St Louis Univ, Sch Med, Dept Pharmacol & Physiol Sci, St Louis, MO 63104 USA  
COUNTRY OF AUTHOR: USA  
SOURCE: CELLULAR AND MOLECULAR LIFE SCIENCES, (AUG 2001) Vol. 58, No. 9, pp. 1206-1215.  
Publisher: BIRKHAUSER VERLAG AG, VIADUKSTRASSE 40-44, PO BOX 133, CH-4010 BASEL, SWITZERLAND.  
ISSN: 1420-682X.  
DOCUMENT TYPE: General Review; Journal  
LANGUAGE: English  
REFERENCE COUNT: 57  
\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS\*

AB Although dopamine is considered the major hypothalamic controller of

prolactin release from the anterior pituitary gland, there is evidence that a yet to be discovered prolactin releasing factor (PRF) also exists in brain. Recently, two peptides were isolated, products of the same prohormone, that were reported to have significant prolactin-releasing activity. These peptides, called prolactin releasing peptides, are not accepted by all investigators to be in fact PRFs. Instead, it appears that their widespread distribution in brain and the presence of receptors for the peptides in sites unrelated to neuroendocrine function are the basis for a variety of central nervous system action including activation of the autonomic nervous system. Thus, these peptides may not be PRFs, but instead neuroactive agents that are involved in many brain circuits with divergent functions.

L8 ANSWER 7 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 2001:350675 CAPLUS  
DOCUMENT NUMBER: 134:336289  
TITLE: Prolactin-releasing peptide  
AUTHOR(S): Hinuma, Shuji  
CORPORATE SOURCE: Discovery Res. Lab. I, Pharm. Discovery Res. Div., Takeda Chem. Ind., Ltd., Japan  
SOURCE: Horumon to Rinsho (2001), 49(4), 377-385  
CODEN: HORIAE; ISSN: 0045-7167  
PUBLISHER: Igaku no Sekaisha  
DOCUMENT TYPE: Journal; General Review  
LANGUAGE: Japanese  
AB A review with 37 refs., on novel bioactive peptide, prolactin releasing peptide (\*\*\*PrRP\*\*\*), isolated as a ligand for orphan G protein-coupled receptors (GPCR), discussing cloning of hGR3, a novel human GPCR, and its structure, discovery of \*\*\*PrRP\*\*\* as a ligand for hGR, tissue distribution of \*\*\*PrRP\*\*\* and its receptors, and physiol. functions of \*\*\*PrRP\*\*\*, including promoting effects on secretion of prolactin, \*\*\*oxytocin\*\*\*, GH-releasing factor, and GnRH, hypertensive action, food intake regulatory function. Receptor-mediated signal transduction of \*\*\*PrRP\*\*\* is also discussed.

L8 ANSWER 8 OF 13 MEDLINE on STN DUPLICATE 3  
ACCESSION NUMBER: 2001060174 MEDLINE  
DOCUMENT NUMBER: 20523989 PubMed ID: 11070188  
TITLE: Morphological survey of prolactin-releasing peptide and its receptor with special reference to their functional roles in the brain.  
AUTHOR: Iyata Y; Iijima N; Kataoka Y; Kakiyama K; Tanaka M; Hosoya M; Hinuma S  
CORPORATE SOURCE: Department of Anatomy and Neurobiology, Kyoto Prefectural University of Medicine, Kawaramachi Hirokoji, Kamigyoku, Kyoto 602-8566, Japan.. yibata@basic.kpu-m.ac.jp  
SOURCE: NEUROSCIENCE RESEARCH, (2000 Nov) 38 (3) 223-30. Ref: 19  
Journal code: 8500749. ISSN: 0168-0102.  
PUB. COUNTRY: Ireland  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
General Review; (REVIEW) (REVIEW, TUTORIAL)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 200012  
ENTRY DATE: Entered STN: 20010322  
Last Updated on STN: 20010322  
Entered Medline: 20001222

AB The gene of prolactin-releasing peptide (\*\*\*PrRP\*\*\*) was first cloned in 1998 and preproproteins encoded by cDNAs produced at least two isoforms of \*\*\*PrRP\*\*\* with different lengths; PrRP31 and PrRP20. \*\*\*PrRP\*\*\* has been shown to release prolactin from the anterior pituitary at least in vitro (Hinuma, Y.S., Habata, Y., Fuji, R., Hosoya, M., Fukusumi, S., Kitada, C., Masuo, Y., Asano, T., Matsumoto, H., Sekiguchi, M., Kurokawa, T., Nishimura, O., Onda, H., and Fujino, A., 1998. A prolactin-releasing peptide in the brain. Nature 393, 272-6). \*\*\*PrRP\*\*\* receptor has also been detected by quantitative reverse transcription polymerase chain reaction, and in situ hybridization histochemistry revealed that expression of \*\*\*PrRP\*\*\* receptor mRNA was found in the broad areas of the brain and in the anterior pituitary of the rat. This review surveys morphological studies on \*\*\*PrRP\*\*\*, \*\*\*PrRP\*\*\* mRNA and \*\*\*PrRP\*\*\* receptor mRNA in the rat brain and discusses the possible functional significance of \*\*\*PrRP\*\*\* in the brain. \*\*\*PrRP\*\*\* immunoreactive neuronal perikarya showed a similar distributional pattern to those with \*\*\*PrRP\*\*\* mRNA signals. However, distribution of nerve processes and terminals with \*\*\*PrRP\*\*\* immunoreactivity was broadly expanded in the forebrain and brainstem. They were hardly detected in the median eminence particularly in its external layer. \*\*\*PrRP\*\*\* receptor mRNA signals were distributed in the preoptic area, and the hypothalamic area, where \*\*\*PrRP\*\*\* immunoreactive nerve processes and terminals were also detected. The strongest signal of \*\*\*PrRP\*\*\* receptor mRNA was detected in the reticular nucleus of the thalamus where neither \*\*\*PrRP\*\*\* immunoreactive nerve processes nor axon terminals were distributed. From the distribution pattern of \*\*\*PrRP\*\*\* and

its receptor, it is suggested that \*\*\*PrRP\*\*\* is involved in control of secretion of \*\*\*oxytocin\*\*\*, corticotropin releasing hormone and somatostatin.

L8 ANSWER 9 OF 13 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN  
ACCESSION NUMBER: 2001:246760 BIOSIS  
DOCUMENT NUMBER: PREV200100246760  
TITLE: Novel function of prolactin-releasing peptide (\*\*\*PrRP\*\*\*) in rats brain.  
AUTHOR(S): Fujiwara, K. [Reprint author]; Maruyama, M. [Reprint author]; Matsumoto, H.; Kitada, C.; Hinuma, S.; Fujino, M.; Inoue, K. [Reprint author]  
CORPORATE SOURCE: Dep. Regulation Biol., Fac Sci., Saitama Univ., Saitama, Japan  
SOURCE: Zoological Science (Tokyo), (December, 2000) Vol. 17, No. Supplement, pp. 11. print.  
Meeting Info.: Seventy-First Annual Meeting of the Zoological Society of Japan. Yamagata, Japan. September 21-23, 2000.  
CODEN: ZOSCEX. ISSN: 0289-0003.  
DOCUMENT TYPE: Conference; (Meeting) Conference; Abstract; (Meeting Abstract)  
LANGUAGE: English  
ENTRY DATE: Entered STN: 23 May 2001  
Last Updated on STN: 19 Feb 2002

L8 ANSWER 10 OF 13 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN  
ACCESSION NUMBER: 2001:251762 BIOSIS  
DOCUMENT NUMBER: PREV200100251762  
TITLE: Distribution and function of Prolactin-releasing Peptide (\*\*\*PrRP\*\*\*) in rat brain.  
AUTHOR(S): Matsumoto, Hirokazu [Reprint author]  
CORPORATE SOURCE: Discovery Research Laboratories I, Pharmaceutical Discovery Research Division, Takeda Chemical Industries Ltd, Osaka, Japan  
SOURCE: Neuroscience Research Supplement, (2000) No. 24, pp. S10. print.  
Meeting Info.: 23rd Annual Meeting of the Japan Neuroscience Society and the 10th Annual Meeting of the Japanese Neural Network Society. Yokohama, Japan. September 04-06, 2000. Japan Neuroscience Society; Japanese Neural Network Society.  
ISSN: 0921-8696.  
DOCUMENT TYPE: Conference; (Meeting) Conference; Abstract; (Meeting Abstract)  
LANGUAGE: English  
ENTRY DATE: Entered STN: 23 May 2001  
Last Updated on STN: 19 Feb 2002

L8 ANSWER 11 OF 13 MEDLINE on STN DUPLICATE 4  
ACCESSION NUMBER: 1999233370 MEDLINE  
DOCUMENT NUMBER: 99233370 PubMed ID: 10218986  
TITLE: Immunocytochemical localization of prolactin-releasing peptide in the rat brain.  
AUTHOR: Maruyama M; Matsumoto H; Fujiwara K; Kitada C; Hinuma S; Onda H; Fujino M; Inoue K  
CORPORATE SOURCE: Department of Regulation Biology, Faculty of Science, Saitama University, Urawa, Japan.  
SOURCE: ENDOCRINOLOGY, (1999 May) 140 (5) 2326-33.  
Journal code: 0375040. ISSN: 0013-7227.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals  
ENTRY MONTH: 199905  
ENTRY DATE: Entered STN: 19990517  
Last Updated on STN: 19990517  
Entered Medline: 19990506

AB A hypothalamic peptide that stimulates PRL release has recently been found as a ligand of an orphan receptor and named PRL-releasing peptide (\*\*\*PrRP\*\*\*). \*\*\*PrRP\*\*\* and its receptor were mainly detected in the hypothalamus and pituitary gland, respectively. Its characteristics suggested \*\*\*PrRP\*\*\* to be a novel hypophysiotropic peptide that stimulates the anterior pituitary PRL cell; however, this remained to be confirmed morphologically. We therefore performed an immunocytochemical study to locate \*\*\*PrRP\*\*\* in the rat brain using the region-specific monoclonal antibodies, P2L-1C and P2L-1T, which recognize the C-terminal and the internal sequence of \*\*\*PrRP\*\*\*, respectively. Our results clearly show that dense immunoreactive nerve fiber networks are present in the paraventricular hypothalamic nucleus, supraoptic nucleus, paratenial thalamic nucleus, basolateral amygdaloid nucleus, and bed nucleus of the stria terminalis. A small number of \*\*\*PrRP\*\*\* nerve fibers was also observed in the neural lobe of the hypophysis. However, no immunopositive fiber was observed in the external region of the median eminence, which is known to be the release site of the classical hypophysiotropic hormones. Also, the distribution of \*\*\*PrRP\*\*\* was not changed during the estrous cycle. We therefore concluded that \*\*\*PrRP\*\*\* probably

differs from classical hypothalamic releasing hormones. We found the immunoreactive cell bodies to be mainly in the caudal portion of the dorsomedial hypothalamic nucleus and solitary nucleus. A double immunocytochemical procedure revealed that some \*\*\*PrRP\*\*\*-positive

neurons showed synaptic contact with \*\*\*oxytocin\*\*\*-positive cell bodies in the paraventricular hypothalamic nucleus, which suggests that \*\*\*PrRP\*\*\* regulates the function of \*\*\*oxytocin\*\*\* neurons.

This is the first report to demonstrate the localization of the novel hypothalamic peptide, \*\*\*PrRP\*\*\*, and we therefore suggest that it takes part in a variety of brain functions. However, it is not yet known how \*\*\*PrRP\*\*\* is transported to the pituitary gland, which is the site that contains the greatest concentration of receptors to this new peptide. Therefore, additional work will be required to resolve this discrepancy between ligand and receptor site location.

L8 ANSWER 12 OF 13 MEDLINE on STN DUPLICATE 5  
ACCESSION NUMBER: 2000077885 MEDLINE  
DOCUMENT NUMBER: 20077885 PubMed ID: 10612638  
TITLE: Central administration of prolactin-releasing peptide stimulates \*\*\*oxytocin\*\*\* release in rats.  
AUTHOR: Maruyama M; Matsumoto H; Fujiwara K; Noguchi J; Kitada C; Hinuma S; Onda H; Nishimura O; Fujino M; Higuchi T; Inoue K  
CORPORATE SOURCE: Department of Regulation Biology, Faculty of Science, Saitama University, Urawa, Japan.  
SOURCE: NEUROSCIENCE LETTERS, (1999 Dec 10) 276 (3) 193-6.  
Journal code: 7600130. ISSN: 0304-3940.  
PUB. COUNTRY: Ireland  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 200001  
ENTRY DATE: Entered STN: 20000114  
Last Updated on STN: 20000114  
Entered Medline: 20000105

AB The prolactin-releasing peptide ( \*\*\*PrRP\*\*\* ) is a novel hypothalamic peptide that has been purified as a ligand of an orphan receptor which is expressed in pituitary cells, and is known to stimulate prolactin release both in vitro and in vivo. We previously determined the immunocytochemical localization of \*\*\*PrRP\*\*\* neurons in the rat brain and our results suggest that \*\*\*PrRP\*\*\* takes part in a variety of brain functions. Additionally, in rats we have demonstrated the synaptic contact of \*\*\*PrRP\*\*\* neurons with \*\*\*oxytocin\*\*\* cell bodies in

the paraventricular hypothalamic nucleus (PVH) and supraoptic nucleus (SON). This observation indicates that \*\*\*PrRP\*\*\* may regulate \*\*\*oxytocin\*\*\* secretion. In the present study, we performed intra-cerebroventricular administration of \*\*\*PrRP\*\*\* to conscious rats, and examined the effect of \*\*\*PrRP\*\*\* on the plasma levels of \*\*\*oxytocin\*\*\* and vasopressin. Our results show that central administration of \*\*\*PrRP\*\*\* increased the plasma \*\*\*oxytocin\*\*\* and vasopressin levels in female rats, but in male rats only \*\*\*oxytocin\*\*\* was increased. These results suggest that the \*\*\*PrRP\*\*\* acts as a neuro-modulator of the function of magnocellular neurons, especially \*\*\*oxytocin\*\*\* neurons, in the brain.

L8 ANSWER 13 OF 13 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN  
ACCESSION NUMBER: 1999:155509 SCISEARCH  
THE GENUINE ARTICLE: 166WD  
TITLE: Gender-biased activity of the novel prolactin releasing peptides - Comparison with thyrotropin releasing hormone reveals only pharmacologic effects  
AUTHOR: Samson W K (Reprint); Resch Z T; Murphy T C; Chang J K  
CORPORATE SOURCE: UNIV N DAKOTA, SCH MED, DEPT PHYSIOL, 501 N COLUMBIA RD, GRAND FORKS, ND 58202 (Reprint); PHOENIX PHARMACEUT INC, MT VIEW, CA  
COUNTRY OF AUTHOR: USA  
SOURCE: ENDOCRINE, (DEC 1998) Vol. 9, No. 3, pp. 289-291.  
Publisher: HUMANA PRESS INC, 999 RIVERVIEW DRIVE SUITE 208, TOTOWA, NJ 07512.  
ISSN: 0969-711X.  
DOCUMENT TYPE: Article; Journal  
FILE SEGMENT: LIFE  
LANGUAGE: English  
REFERENCE COUNT: 12  
\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS\*

AB The prolactin- (PRL) releasing activities of the newly described PRL-releasing peptides ( \*\*\*PrRPs\*\*\* ) were compared to that of thyrotropin-releasing hormone (TRH) in dispersed, rat anterior pituitary cell cultures. A dose-related stimulation of PRL release by TRH was observed in cells harvested from both intact male and random cycle female pituitary donors. The minimum effective dose of TRH ranged from 1 to 10 nM. Neither \*\*\*PrRP\*\*\* -20 nor \*\*\*PrRP\*\*\* -31 significantly altered PRL secretion in cells from male donors even at doses as high as 1 CIM In cells harvested from females, only the highest doses of \*\*\*PrRP\*\*\* -20 and \*\*\*PrRP\*\*\* -31 tested (0.1 and 1.0 mu M) significantly

stimulated PRL secretion. The PRL-releasing action of TRH was observed already at 15 min of incubation, whereas those of \*\*\*PrRP\*\*\* -20 and \*\*\*PrRP\*\*\* -31 appeared only after 1 and 2 h of incubation, and the magnitude of PRL release in the presence of 1 mu M \*\*\*PrRPs\*\*\* was significantly less than that of a similar dose of TRH. These data do not suggest a physiologically relevant role for the \*\*\*PrRPs\*\*\* in the neuroendocrine regulation of PRL secretion in intact male and nonlactating, random-cycle female rats.

=> d 19 ibib abs 1-18

L9 ANSWER 1 OF 18 MEDLINE on STN DUPLICATE 1  
ACCESSION NUMBER: 2003211625 MEDLINE  
DOCUMENT NUMBER: 22618248 PubMed ID: 12732249  
TITLE: Facilitative role of \*\*\*prolactin\*\*\* - \*\*\*releasing\*\*\* \*\*\*peptide\*\*\* neurons in \*\*\*oxytocin\*\*\* cell activation after conditioned-fear stimuli.  
AUTHOR: Zhu L L; Onaka T  
CORPORATE SOURCE: Department of Physiology, Jichi Medical School, Minamikawachi-machi, Tochigi-ken 329-0498, Japan.  
SOURCE: NEUROSCIENCE, (2003) 118 (4) 1045-53.  
Journal code: 7605074. ISSN: 0306-4522.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 200307  
ENTRY DATE: Entered STN: 20030507  
Last Updated on STN: 20030713  
Entered Medline: 20030711

AB Emotional stress activates \*\*\*oxytocin\*\*\* neurons in the hypothalamic supraoptic and paraventricular nuclei and stimulates \*\*\*oxytocin\*\*\* release from the posterior pituitary. \*\*\*Oxytocin\*\*\* neurons in the hypothalamus have synaptic contact with \*\*\*prolactin\*\*\* - \*\*\*releasing\*\*\* \*\*\*peptide\*\*\* (PrRP) neurons. Intracerebroventricular administration of PrRP stimulates \*\*\*oxytocin\*\*\* release from the pituitary. These observations raise the possibility that PrRP neurons play a role in \*\*\*oxytocin\*\*\* response to emotional stress. To test this hypothesis, we injected retrograde tracers into the supraoptic nucleus. Conditioned-fear stimuli induced expression of Fos protein, an immediate early gene product, in the PrRP neurons in the medulla oblongata after conditioned-fear stimuli. Conditioned-fear stimuli increased the number of PrRP cells expressing Fos protein especially in the dorsomedial medulla. In order to determine whether PrRP cells projecting to the supraoptic nucleus are activated after conditioned-fear stimuli, we injected retrograde tracers into the supraoptic nucleus. Conditioned-fear stimuli induced expression of Fos protein in retrogradely labeled PrRP cells in the dorsomedial medulla. Finally we investigated whether immunoneutralization of endogenous PrRP impairs \*\*\*oxytocin\*\*\* release after emotional stimuli. An i.c.v. injection of a mouse monoclonal anti-PrRP antibody impaired release of \*\*\*oxytocin\*\*\* but not of adrenocorticotrophic hormone or prolactin and did not significantly change freezing behavior in response to conditioned-fear stimuli. From these data, we conclude that PrRP neurons in the dorsomedial medulla that project to the hypothalamus play a facilitative role in \*\*\*oxytocin\*\*\* release after emotional stimuli in rats.

L9 ANSWER 2 OF 18 MEDLINE on STN DUPLICATE 2  
ACCESSION NUMBER: 2003207466 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 12668869  
TITLE: \*\*\*Prolactin\*\*\* - \*\*\*releasing\*\*\* \*\*\*peptide\*\*\* and its homolog RFRP-1 act in hypothalamus but not in anterior pituitary gland to stimulate stress hormone secretion.  
AUTHOR: Samson Willis K; Keown Cynthia; Samson Charles K; Samson Henry W; Lane Brian; Baker Jennifer R; Taylor Meghan M  
CORPORATE SOURCE: Department of Pharmacological and Physiological Science, Saint Louis University School of Medicine, St Louis, MO 63104, USA.. samsonwk@slu.edu  
CONTRACT NUMBER: 1 R01 HL50287 (NHLBI)  
SOURCE: Endocrine, (2003 Feb-Mar) 20 (1-2) 59-66.  
Journal code: 9434444. ISSN: 0969-711X.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 200312  
ENTRY DATE: Entered STN: 20030506  
Last Updated on STN: 20031217  
Entered Medline: 20031203

AB The RF-amide peptides (RFRPs), including prolactin (PRL)-releasing peptide-31 (PrRP-31) and RFRP-1, have been reported to stimulate stress hormone secretion by either direct pituitary or indirect hypothalamic actions. We examined the possible direct effects of these peptides on PRL and adrenocorticotropin (adrenocorticotrophic hormone [ACTH]) release from dispersed anterior pituitary cells in culture and on PRL and ACTH secretion following intracerebroventricular (i.c.v.) administration in vivo. Neither peptide significantly altered PRL or ACTH release from cultured pituitary cells (male rat donors). Central administration of 1.0 and 3.0 nmol of PrRP-31, but only the higher dose of RFRP-1, significantly

elevated serum corticosterone levels in conscious male rats. The effect of PrRP-31 was not blocked by pretreatment (i.v.) with the corticotropin-releasing hormone (CRH) antagonist, alpha-helical CRH 9-41; however, pretreatment of the animals (i.v.) with an antiserum to CRH significantly lowered the hypothalamic-pituitary-adrenal axis response to central administration of PrRP-31. On the other hand, the release of PRL was significantly elevated by 3.0 nmol of RFRP-1, but not PrRP-31, in similarly treated, conscious male rats. Pretreatment with the catecholamine synthesis inhibitor, alpha-methyl-para-tyrosine, prevented the stimulation of PRL secretion observed following central administration of RFRP-1. RFRP-1 similarly did not alter PRL secretion in rats pretreated with the dopamine, D(2) receptor blocker, domperidone. These results suggest that the RF-amide peptides are not true neuroendocrine regulators of stress hormone secretion in the rat but, instead, act centrally to alter the release of neuroendocrine factors that do act in the pituitary gland to control PRL and ACTH release. In the case of RFRP-1, stimulation of PRL secretion is potentially owing to an action of the peptide to inhibit dopamine release into the median eminence. The corticosterone secretion observed following central administration of PrRP-31 does not appear, based on our current results, to be solely owing to an action of the peptide on CRH-producing neurons but, instead, may be a result of the ability of PrRP-31 to increase as well the exposure of the corticotrophs in vivo to other ACTH secretagogues, such as \*\*\*oxytocin\*\*\* or vasopressin.

L9 ANSWER 3 OF 18 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN DUPLICATE 3  
ACCESSION NUMBER: 2003:517487 SCISEARCH  
THE GENUINE ARTICLE: 688LW  
TITLE: \*\*\*Prolactin\*\*\* - \*\*\*releasing\*\*\* \*\*\*peptides\*\*\*  
AUTHOR: Samson W K (Reprint); Taylor M M; Baker J R  
CORPORATE SOURCE: St Louis Univ, Sch Med, Dept Pharmacol & Physiol Sci, 1402 S Grand Blvd, St Louis, MO 63104 USA (Reprint); St Louis Univ, Sch Med, Dept Pharmacol & Physiol Sci, St Louis, MO 63104 USA  
COUNTRY OF AUTHOR: USA  
SOURCE: REGULATORY PEPTIDES, (15 JUN 2003) Vol. 114, No. 1, pp. 1-5.  
Publisher: ELSEVIER SCIENCE BV, PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS.  
ISSN: 0167-0115.  
DOCUMENT TYPE: General Review; Journal  
LANGUAGE: English  
REFERENCE COUNT: 38  
\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS\*

AB Physiologic control of prolactin (PRL) secretion is largely dependent upon levels of dopamine accessing the adenohypophysis via the hypophysial portal vessels. However, it is clear that other factors of hypothalamic origin can modulate hormone secretion in the absence or presence of dopamine. Several neuropeptides have been identified as PRL releasing factors (PRFs) but none of these peptides appears to be a major determinant of PRL secretion in vivo. There remain uncharacterized activities in hypothalamic extracts that can alter secretion and production of the hormone. In addition, there exist a wide variety of substances (neurotransmitters, neuromodulators, neuropeptides) that can act within the hypothalamus to modify the neuroendocrine regulation of PRL secretion. These factors may not be considered true PRFs because their actions are not exerted directly at the level of the lactotroph; however, they can act in brain to stimulate PRL release in vivo and therefore might be considered PRL releasing peptides (PRPs). (C) 2003 Elsevier Science B.V. All rights reserved.

L9 ANSWER 4 OF 18 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN DUPLICATE 4  
ACCESSION NUMBER: 2003-221302 [21] WPIDS  
DOC. NO. CPI: C2003-056080  
TITLE: Monodispersed mixture of conjugates useful in treatment of disease e.g. diabetes comprises drug coupled to oligomer containing polyalkylene glycol moiety.  
DERWENT CLASS: A96 B04 D16  
INVENTOR(S): ANSARI, A M; EKWRURIB, N N;  
ODENBAUGH, A L; PRICE, C H  
PATENT ASSIGNEE(S): (NOBE-N) NOBEX CORP; (ANSA-I) ANSARI A M; (EKWU-I) EKWRURIB N N; (ODEN-I) ODENBAUGH A L;  
(PRIC-I) PRICE C H  
COUNTRY COUNT: 100  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2002098446 A1		20021212 (200321)*	EN	101	
RW: AT	BE	CH	CY	DE	DK
EA	ES	FI	FR	GB	GH
GM	GR	IE	IT	KE	LS
LU	MC	MW	MZ	NL	OA
PT	SD	SE	SL	SZ	TR
TZ	UG	ZM	ZW	W: AE	AG
AL	AM	AT	AU	AZ	BA
BB	BG	BR	BY	BZ	CA
CH	CN	CO	CR	CU	CZ
DE	DM	DZ	EC	EE	ES
FI	GB	GD	GE	GH	GM
HR	HU	ID	IL	IN	IS
JP	KE	KG	KP	KR	

KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ  
NO NZ OM PH PL PT  
RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US  
UZ VN YU ZA ZM  
ZW  
BR 2001006401 A 20030211 (200321)  
JP 2003104913 A 20030409 (200333) 308  
US 2003228275 A1 20031211 (200382)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002098446 A1		WO 2002-US17567	20020604
BR 2001006401 A		BR 2001-6401	20011011
JP 2003104913 A		JP 2001-317307	20011015
US 2003228275 A1		US 2001-873797	20010604

PRIORITY APPLN. INFO: US 2001-873797 20010604

AN 2003-221302 [21] WPIDS

AB WO 200298446 A UPAB: 20030328

NOVELTY - A substantially monodispersed mixture of conjugates comprises a drug coupled to an oligomer (a) containing a polyalkylene glycol moiety (b).

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for synthesizing a monodispersed mixture of conjugate, that involves:

(i) reacting a monodispersed mixture containing compounds of formula

R1(OC2H4)m-O-X+ (I) with a substantially monodispersed mixture containing compounds of formula R2(OC2H4)q-OMs (II) to form a monodispersed mixture

comprising polymers of formula R2(OC2H4)m+q-OR1 (III); (ii) activating (III) to form a monodispersed mixture of activated polymers capable of reacting with a drug; and

(iii) reacting the monodispersed mixture of activated polymers with a monodispersed mixture of drugs to form a monodispersed mixture of conjugates comprising drug coupled to an oligomer containing

polyethylene glycol with m+p subunits.

R1 and R2 = H or lipophilic moiety; m, q = 1 - 25; and X+ = positive ion.

ACTIVITY - Antidiabetic.

MECHANISM OF ACTION - None given.

USE - In the treatment of disease states e.g. insulin deficiency.

Male CF-1 mice were housed in a room. Mice were acclimated to housing

conditions for 48 - 72 hours prior to the day of experiment. Prior to dosing, mice were fasted overnight and water was provided ad libitum.

Mice were distributed into groups of five animals per time point and were administered a single oral dose of a PEG7-octyl-sCT, diconjugate

(Octyl Di) (test) or salmon calcitonin (sCT or Calcitonin) for comparison purposes. Oral doses were administered at 10 ml/kg in a

phosphate-buffered PEG7-octyl-sCT, diconjugate formulation. The buffered formulation

was prepared by adding phosphate buffer (80 mL) in a beaker. The sodium cholate was added to the phosphate buffer with stirring until dissolved.

The deoxy cholate was then added and stirring was continued until dissolved. The PEG7-octyl-sCT, diconjugate, solution was added. The

remaining phosphate buffer was added to achieve a final weight of 100 g.

Dose-response curves were constructed. At appropriate time points,

mice were ether-anesthetized, the vena cavae exteriorized, and blood samples were obtained. Blood aliquots were clotted at 22 deg. C for 1 hour, and

the sera removed and pipetted into a clean receptacle. Total serum calcium

was determined for each animal. Serum calcium data were plotted and pharmacokinetic parameters determined. Means and standard deviations

(or standard errors) were calculated and plotted to determine effect differences among dosing groups. The % baseline calcium drop at 2

micro g/kg dose for the test was 21%. The in vitro activity of

PEG7-octyl-sCT and PEG7-decyl-sCT mono- and diconjugates, the stearate-PEG6-sCT, diconjugate, and stearate-PEG8-sCT, diconjugate, appeared to have in

vivo activity that was comparable with the in vivo activity observed for the PEG7-octyl-sCT and PEG7-decyl-sCT, mono- and di-conjugates. The

improved in vivo activity of the stearate containing conjugates indicated that these conjugates were undergoing hydrolysis in vivo to provide an

active salmon calcitonin or active salmon calcitonin-PEG conjugate.

ADVANTAGE - The mixture exhibits greater in vivo/in vitro activity than the in vivo/in vitro activity of the polydispersed mixture of

drug-oligomer conjugates having same number of average molecular weight as the mixture. The mixture has increased resistance to degradation by

chymotrypsin when compared to the resistance to degradation by chymotrypsin of a polydispersed mixture of insulin drug-oligomer

conjugate mixture having same number average molecular weight as the mixture.

The mixture has inter-subject variability that is less than the inter-subject variability of a polydispersed mixture of insulin drug-oligomer

conjugates having same number average molecular weight as the mixture.

Dwg.0/43

L9 ANSWER 5 OF 18 WPIDS COPYRIGHT 2004 THOMSON

DERWENT ON STN

ACCESSION NUMBER: 2001-321036 [34] WPIDS

DOC. NO. CPI: C2001-099105

TITLE: A human \*\*\*prolactin\*\*\* \*\*\*releasing\*\*\* \*\*\*peptide\*\*\* receptor gene promoter and its medicinal

uses..

DERWENT CLASS: B04 D16

PATENT ASSIGNEE(S): (TAKE) TAKEDA CHEM IND LTD

COUNTRY COUNT: 1

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
JP 2001054386 A		20010227 (200134)*	16		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
JP 2001054386 A		JP 1999-230434	19990817

PRIORITY APPLN. INFO: JP 1999-230434 19990817

AN 2001-321036 [34] WPIDS

AB JP2001054386 A UPAB: 20010620

NOVELTY - An artificial human \*\*\*prolactin\*\*\* \*\*\*releasing\*\*\* \*\*\*peptide\*\*\* (I).

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for:

(1) DNA containing a promoter region having a regulator sequence of

\*\*\*prolactin\*\*\* \*\*\*releasing\*\*\* \*\*\*peptide\*\*\* receptor gene, particularly a regulator sequence containing whole or part of Pit-1

(pituitary specific positive transcription factor I) shown by a fully defined 4038 base pair sequence given in the specification;

(2) a recombinant vector comprising the DNA;

(3) a transformant prepared by transformation with the DNA;

(4) a screening method for compounds having stimulating or inhibiting

activity to (I) used for regulation of pituitary, central nervous and pancreatic functions, secretion of prolactin or \*\*\*oxytocin\*\*\* ;

(5) a screening kit for the stimulators and inhibitors; and

(6) medicinal compositions containing the identified compounds.

ACTIVITY - Neuroprotective.

MECHANISM OF ACTION - None given.

USE - (I) is useful for the treatment of human prolactin related diseases including regulation of pituitary, central nervous and pancreatic

functions, and control of secretion of prolactin.

ADVANTAGE - The promoter contains a regulator sequence and has

activities similar to in vivo conditions and can be used for treatment of human prolactin related diseases and screening of drugs.

Dwg.0/7

L9 ANSWER 6 OF 18 SCISEARCH COPYRIGHT 2004 THOMSON

ISI ON STN

ACCESSION NUMBER: 2001:765552 SCISEARCH

THE GENUINE ARTICLE: 473DK

TITLE: The metastasis suppressor gene KiSS-1 encodes

kisspeptins, the natural ligands of the orphan G protein-coupled

receptor GPR54

AUTHOR: Kotani M; Dethieux M; Vandenberggaerde A; Communi

D; Vanderwinden J M; Le Poul E; Brezillon S; Tyldesley R;

Suarez-Huerta N; Vandeput F; Blanpain C; Schiffmann S N;

Vassart G; Parmentier M (Reprint)

CORPORATE SOURCE: Free Univ Brussels, IRIBHN, Campus

Erasmus, Route Lennik 808, B-1070 Brussels, Belgium (Reprint); Free Univ

Brussels, IRIBHN, B-1070 Brussels, Belgium; Free Univ

Brussels, Gen Med Serv, B-1070 Brussels, Belgium;

Euroscreen SA, B-1070 Brussels, Belgium; Micromass Ltd,

Manchester M23 9LZ, Lancs, England; Free Univ Brussels,

Neurophysiol Lab, B-1070 Brussels, Belgium

COUNTRY OF AUTHOR: Belgium; England

SOURCE: JOURNAL OF BIOLOGICAL CHEMISTRY, (14

SEP 2001) Vol. 276, No. 37, pp. 34631-34636.

Publisher: AMER SOC BIOCHEMISTRY MOLECULAR

BIOLOGY INC, 9650 ROCKVILLE PIKE, BETHESDA, MD 20814 USA.

ISSN: 0021-9258.

DOCUMENT TYPE: Article; Journal

LANGUAGE: English

REFERENCE COUNT: 23

\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL

FORMATS\*

AB Natural peptides displaying agonist activity on the orphan G

protein-coupled receptor GPR54 were isolated from human placenta.

These

54-, 14-, and 13-amino acid peptides, with a common RF-amide C

terminus,

derive from the product of KiSS-1, a metastasis suppressor gene for

melanoma cells, and were therefore designated kisspeptins. They bound

with

low nanomolar affinities to rat and human GPR54 expressed in Chinese

hamster ovary K1 cells and stimulated PIP2 hydrolysis, Ca2+

mobilization,

arachidonic acid release, ERK1/2 and p38 MAP kinase phosphorylation,

and

stress fiber formation but inhibited cell proliferation. Human GPR54

was

highly expressed in placenta, pituitary, pancreas, and spinal cord,

suggesting a role in the regulation of endocrine function. Stimulation of

\*\*\*oxytocin\*\*\* secretion after kisspeptin administration to rats

confirmed this hypothesis.

L9 ANSWER 7 OF 18 SCISEARCH COPYRIGHT 2004 THOMSON

ISI ON STN

ACCESSION NUMBER: 2001:888742 SCISEARCH

THE GENUINE ARTICLE: 487WT

TITLE: Sleep-promoting activity of \*\*\*prolactin\*\*\* - \*\*\*releasing\*\*\* \*\*\*peptide\*\*\* (PrRP) in the rat

AUTHOR: Zhang S Q; Inoue S; Kimura M (Reprint)

CORPORATE SOURCE: Tokyo Med & Dent Univ, Inst Biomater & Bioengn, Dept

Biocycbemet, Chiyoda Ku, 2-3-10 Kanda Surugadai, Tokyo

1010062, Japan (Reprint); Tokyo Med & Dent Univ, Inst Biomater & Bioengn, Dept Biocycbemet, Chiyoda Ku, Tokyo

1010062, Japan

COUNTRY OF AUTHOR: Japan

SOURCE: NEUROREPORT, (29 OCT 2001) Vol. 12, No. 15, pp. 3173-3176.

Publisher: LIPPINCOTT WILLIAMS & WILKINS, 530

WALNUT ST, PHILADELPHIA, PA 19106-3621 USA.

ISSN: 0959-4965.

DOCUMENT TYPE: Article; Journal

LANGUAGE: English

REFERENCE COUNT: 25

\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL

FORMATS\*

AB The present study examines whether or not \*\*\*prolactin\*\*\* - \*\*\*releasing\*\*\* \*\*\*peptide\*\*\* (PrRP) infused

intracerebroventricularly (i.c.v.) affects sleep and the release of prolactin (PRL) and growth hormone (GH) in rats. At a dose of 0.1

nmol, PrRP promoted rapid-eye-movement (REM) sleep, whereas 1.0 nmol increased

both non-REM and REM sleep and 10.0 nmol enhanced only non-REM sleep.

During the i.c.v. infusion of PrRP with 0.1 nmol, levels of plasma PRL were elevated, but GH levels were significantly decreased. Since it is

reported that PrRP fails to induce PRL release from the male pituitary, the stimulatory effects of PrRP on PRL release observed here seem to

be indirect. However, PRL stimulated by i.c.v.-infused PrRP could take part in

the REM sleep-promoting activity of PrRP. NeuroReport 12:3173-3176 (C)

2001 Lippincott Williams & Wilkins.

L9 ANSWER 8 OF 18 SCISEARCH COPYRIGHT 2004 THOMSON

ISI ON STN

ACCESSION NUMBER: 2001:375148 SCISEARCH

THE GENUINE ARTICLE: 427YN

TITLE: \*\*\*Prolactin\*\*\* - \*\*\*releasing\*\*\* \*\*\*peptide\*\*\* as a novel stress mediator in the central nervous system

AUTHOR: Maruyama M; Matsumoto H; Fujiwara K; Noguchi J; Kitada C;

Fujino M; Inoue K (Reprint)

CORPORATE SOURCE: Saitama Univ, Fac Sci, Dept Regul Biol, 255

Shimo Ohkubo, Urawa, Saitama 3380825, Japan (Reprint); Saitama

Univ, Fac Sci, Dept Regul Biol, Urawa, Saitama 3380825, Japan; Takeda Chem Ind Co Ltd, Pharmaceut Discovery Res

Div, Discovery Res Labs, Tsukuba, Ibaraki 3004293, Japan

COUNTRY OF AUTHOR: Japan

SOURCE: ENDOCRINOLOGY, (MAY 2001) Vol. 142, No. 5, pp. 2032-2038.

Publisher: ENDOCRINE SOC, 4350 EAST WEST

HIGHWAY SUITE 500, BETHESDA, MD 20814-4110 USA.

ISSN: 0013-7227.

DOCUMENT TYPE: Article; Journal

LANGUAGE: English

REFERENCE COUNT: 34

\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL

FORMATS\*

AB A1/A2 noradrenergic neurons in the medulla oblongata are well

known to mediate stress signals in the central nervous system. Stress activates

A1/A2 noradrenergic neurons, and then noradrenaline (NA) stimulates

ACTH: secretion through hypothalamic CRH. On the other hand, PRL-releasing

peptide (PrRP) was recently isolated and was found to be produced by some

A1/A2 neurons and the dorsomedial hypothalamic nucleus. We

previously demonstrated that PrRP neurons make synapse-like contact with

hypothalamic CRH neurons. In fact, we demonstrated that the central administration of

PrRP stimulates CRH-mediated ACTH secretion. Furthermore, it has

been reported that PrRP neurons in A1/A2 cell groups are colocalized with

tyrosine hydroxylase (TH), which is known as the marker enzyme of

catecholaminergic neurons. These data strongly suggest that PrRP is

related to stress-responsive signal transduction, and PrRP and NA

cooperatively modulate the hypothalamo-pituitary-adrenal axis. We

therefore examined the effect of water immersion-restraint stress on

c-Fos

protein accumulation in PrRP- and TH-immunoreactive neurons. The

synergistic effects of PrRP and NA on plasma ACTH elevation were

also

examined. The results clearly showed that c-Fos protein accumulation

dramatically increased in the nuclei of A1/A2 and dorsomedial

hypothalamic nucleus PrRP neurons. In addition, it was revealed that c-Fos protein

was

specifically expressed in the PrRP/TH double positive cells in the A1/A2

cell groups. We also demonstrated that the central administration of

PrRP

and NA in combination at subactive (noneffective) doses clearly induced plasma ACTH elevation. Here we report that PrRP is a novel and important mediator of the hypothalamo-pituitary-adrenal axis for the stress response.

L9 ANSWER 9 OF 18 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN  
ACCESSION NUMBER: 2001:760515 SCISEARCH  
THE GENUINE ARTICLE: 474CQ  
TITLE: The \*\*\*prolactin\*\*\* \*\*\*releasing\*\*\*  
\*\*\*peptides\*\*\* : RF-amide peptides  
AUTHOR: Taylor M M; Samson W K (Reprint)  
CORPORATE SOURCE: St Louis Univ, Sch Med, Dept Pharmacol & Physiol Sci, 1402

S Grand Blvd, St Louis, MO 63104 USA (Reprint); St Louis Univ, Sch Med, Dept Pharmacol & Physiol Sci, St Louis, MO 63104 USA

COUNTRY OF AUTHOR: USA  
SOURCE: CELLULAR AND MOLECULAR LIFE SCIENCES, (AUG 2001) Vol. 58, No. 9, pp. 1206-1215.  
Publisher: BIRKHAUSER VERLAG AG, VIADUKSTRASSE 40-44, PO BOX 133, CH-4010 BASEL, SWITZERLAND.  
ISSN: 1420-682X.

DOCUMENT TYPE: General Review; Journal  
LANGUAGE: English  
REFERENCE COUNT: 57

\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS\*

AB Although dopamine is considered the major hypothalamic controller of

prolactin release from the anterior pituitary gland, there is evidence that a yet to be discovered prolactin releasing factor (PRF) also exists in brain. Recently, two peptides were isolated, products of the same prohormone, that were reported to have significant prolactin-releasing activity. These peptides, called \*\*\*prolactin\*\*\* \*\*\*releasing\*\*\* \*\*\*peptides\*\*\*, are not accepted by all investigators to be in fact PRF's. Instead, it appears that their widespread distribution in brain and the presence of receptors for the peptides in sites unrelated to neuroendocrine function are the basis for a variety of central nervous system action including activation of the autonomic nervous system.

Thus, these peptides may not be PRF's, but instead neuroactive agents that are involved in many brain circuits with divergent functions.

L9 ANSWER 10 OF 18 CAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 2001:350675 CAPLUS  
DOCUMENT NUMBER: 134:336289  
TITLE: \*\*\*Prolactin\*\*\* - \*\*\*releasing\*\*\*  
\*\*\*peptide\*\*\*

AUTHOR(S): Hinuma, Shuji  
CORPORATE SOURCE: Discovery Res. Lab. I, Pharm. Discovery Res. Div.,

Takeda Chem. Ind., Ltd., Japan  
SOURCE: Hormon to Rinsho (2001), 49(4), 377-385  
CODEN: HORIAE; ISSN: 0045-7167

PUBLISHER: Igaku no Sekaisha  
DOCUMENT TYPE: Journal; General Review  
LANGUAGE: Japanese

AB A review with 37 refs., on novel bioactive peptide, \*\*\*prolactin\*\*\* \*\*\*releasing\*\*\* \*\*\*peptide\*\*\* (PrRP), isolated as a ligand for orphan G protein-coupled receptors (GPCR), discussing cloning of hGR3, a novel human GPCR, and its structure, discovery of PrRP as a ligand for hGR,

tissue distribution of PrRP and its receptors, and physiol. functions of PrRP, including promoting effects on secretion of prolactin, \*\*\*oxytocin\*\*\*, GH-releasing factor, and GnRH, hypertensive action, food intake regulatory function. Receptor-mediated signal transduction of PrRP is also discussed.

L9 ANSWER 11 OF 18 CAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 2001:619926 CAPLUS  
DOCUMENT NUMBER: 135:327407  
TITLE: Regulatory circuits of the pituitary gland

AUTHOR(S): Stefaneanu, Lucia  
CORPORATE SOURCE: Department of Laboratory Medicine, St. Michael's

Hospital, University of Toronto, Toronto, ON, Can.  
SOURCE: Neuroimmune Biology (2001), 1 (New Foundation of Biology), 99-113  
CODEN: NBEIAQ; ISSN: 1567-7443

PUBLISHER: Elsevier Science B.V.  
DOCUMENT TYPE: Journal; General Review  
LANGUAGE: English

AB A review with refs. Hormones are messengers that enable the communication among the nervous, endocrine and immune systems, to maintain homeostasis.

The pituitary gland produces hormones with multiple functions, including stimulation of peripheral endocrine glands, i.e., thyroid, adrenals, and gonads, of body growth, lactation, and several metabolic processes. Pituitary hormones are also playing an integrating role in the function of the immune system. According to the classic concept, the six anterior pituitary hormones, namely growth hormone (GH), prolactin (PRL), ACTH, TSH, and gonadotropins (FSH and LH) are produced by five pituitary cell types represented by somatotrophs, lactotrophs, corticotrophs, thyrotrophs, and bihormonal gonadotrophs. The hormone prodn. and proliferation of pituitary cells are controlled by hypothalamic releasing and inhibiting hormones as well as peripheral target hormones. It is

well established that GH, PRL, and TSH are involved in the stimulation of immune responses, whereas ACTH in the depression of immune responses. The GH prodn. by somatotrophs is stimulated by growth hormone-releasing hormone (GHRH) and inhibited by somatostatin (SRIF), both produced by hypothalamus. GH is released into circulation and stimulates the liver and other tissues including hematopoietic cells to produce insulin-like growth factor I (IGF-I). IGF-I has a stimulation effect on the size of lymphoid organs. Pituitary PRL secretion by lactotrophs is under tonic inhibition by hypothalamic dopamine. Several candidates for PRL

releasing factor (PRF) such as vasoactive intestinal peptide (VIP), TSH stimulating hormone (TRH), galanin, \*\*\*oxytocin\*\*\* and \*\*\*prolactin\*\*\* - \*\*\*releasing\*\*\* \*\*\*peptide\*\*\* have been proposed, but a physiol. PRF has not been identified. TSH prodn. by thyrotrophs is stimulated by hypothalamic TRH, and inhibited by SRIF. ACTH prodn. by corticotrophs is stimulated by corticotropin releasing hormone (CRH), and in some species by arginine vasopressin (AVP), which is co-localized with CRH in the hypothalamus. In response to host stress, corticotrophs integrate peripheral and brain signals and release ACTH that stimulates adrenal glucocorticoid release, followed by immunosuppression. Besides hormones, pituitary cells synthesize many growth factors including cytokines known to regulate growth and differentiation of hematopoietic and inflammatory cells. They comprise interleukins, leukemia inhibitory factor, macrophage migration inhibitory factor, epidermal growth factor, transforming growth factors, fibroblastic growth factors, nerve growth factor, galanin, IGFs, activin, and inhibins. The cytokines may be released into circulation or locally acting directly on hormone producing cells and adding an addnl. level of pituitary control. An intrapituitary network of cytokines is induced in the acute phase of septic shock, in addn. to the circulating, peripherally derived cytokines. Recently, mice lacking hormones, cytokines, or their receptors have been produced by genetic manipulation, helping to better understand their role in the cross-talk between immune and neuroendocrine system.

REFERENCE COUNT: 104 THERE ARE 104 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 12 OF 18 MEDLINE on STN DUPLICATE  
5  
ACCESSION NUMBER: 2001060174 MEDLINE  
DOCUMENT NUMBER: 20523989 PubMed ID: 11070188

TITLE: Morphological survey of \*\*\*prolactin\*\*\* - \*\*\*releasing\*\*\* \*\*\*peptide\*\*\* and its receptor with special reference to their functional roles in the brain.  
AUTHOR: Iбата Y; Iijima N; Kataoka Y; Kakiyama K; Tanaka M; Hosoya M; Hinuma S

CORPORATE SOURCE: Department of Anatomy and Neurobiology, Kyoto Prefectural University of Medicine, Kawaramachi Hirokoji, Kamigyoku, Kyoto 602-8566, Japan. yibata@basic.kpu-m.ac.jp  
SOURCE: NEUROSCIENCE RESEARCH, (2000 Nov) 38 (3) 223-30. Ref: 19  
Journal code: 8500749. ISSN: 0168-0102.

PUB. COUNTRY: Ireland  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
General Review; (REVIEW)  
(REVIEW, TUTORIAL)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 200012  
ENTRY DATE: Entered STN: 20010322  
Last Updated on STN: 20010322  
Entered Medline: 20001222

AB The gene of \*\*\*prolactin\*\*\* - \*\*\*releasing\*\*\* \*\*\*peptide\*\*\* (PrRP) was first cloned in 1998 and preproteins encoded by cDNAs produced at least two isoforms of PrRP with different lengths; PrRP31 and PrRP20. PrRP has been shown to release prolactin from the anterior pituitary at least in vitro (Hinuma, Y.S., Habata, Y., Fuji, R., Hosoya, M., Fukusumi, S., Kitada, C., Masuo, Y., Asano, T., Matsumoto, H., Sekiguchi, M., Kurokawa, T., Nishimura, O., Onda, H., and Fujino, A., 1998. A \*\*\*prolactin\*\*\* - \*\*\*releasing\*\*\* \*\*\*peptide\*\*\* in the

brain. Nature 393, 272-6). PrRP receptor has also been detected by quantitative reverse transcription polymerase chain reaction, and in situ hybridization histochemistry revealed that expression of PrRP receptor mRNA was found in the broad areas of the brain and in the anterior pituitary of the rat. This review surveys morphological studies on PrRP, PrRP mRNA and PrRP receptor mRNA in the rat brain and discusses the possible functional significance of PrRP in the brain. PrRP immunoreactive neuronal perikarya showed a similar distributional pattern to those with PrRP mRNA signals. However, distribution of nerve processes and terminals with PrRP immunoreactivity was broadly expanded in the forebrain and brainstem. They were hardly detected in the median eminence particularly in its external layer. PrRP receptor mRNA signals were distributed in the preoptic area, and the hypothalamic area, where PrRP immunoreactive nerve processes and terminals were also detected. The

strongest signal of PrRP receptor mRNA was detected in the reticular nucleus of the thalamus where neither PrRP immunoreactive nerve processes nor axon terminals were distributed. From the distribution pattern of PrRP and its receptor, it is suggested that PrRP is involved in control of secretion of \*\*\*oxytocin\*\*\*, corticotropin releasing hormone and somatostatin.

L9 ANSWER 13 OF 18 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN  
ACCESSION NUMBER: 2001:246760 BIOSIS  
DOCUMENT NUMBER: PREV200100246760  
TITLE: Novel function of \*\*\*prolactin\*\*\* - \*\*\*releasing\*\*\* \*\*\*peptide\*\*\* (PrRP) in rats brain.

AUTHOR(S): Fujiwara, K. [Reprint author]; Maruyama, M. [Reprint author]; Matsumoto, H.; Kitada, C.; Hinuma, S.; Fujino, M.; Inoue, K. [Reprint author]  
CORPORATE SOURCE: Dep. Regulation Biol., Fac Sci., Saitama Univ., Saitama,

Japan  
SOURCE: Zoological Science (Tokyo), (December, 2000) Vol. 17, No.

Supplement, pp. 11. print.  
Meeting Info.: Seventy-First Annual Meeting of the Zoological Society of Japan. Yamagata, Japan. September 21-23, 2000.  
CODEN: ZOSCEX. ISSN: 0289-0003.

DOCUMENT TYPE: Conference; (Meeting)  
Conference; Abstract; (Meeting Abstract)  
LANGUAGE: English  
ENTRY DATE: Entered STN: 23 May 2001  
Last Updated on STN: 19 Feb 2002

L9 ANSWER 14 OF 18 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN  
ACCESSION NUMBER: 2001:251762 BIOSIS  
DOCUMENT NUMBER: PREV200100251762

TITLE: Distribution and function of \*\*\*Prolactin\*\*\* - \*\*\*releasing\*\*\* \*\*\*peptide\*\*\* (PrRP) in rat brain.  
AUTHOR(S): Matsumoto, Hirokazu [Reprint author]  
CORPORATE SOURCE: Discovery Research Laboratories I, Pharmaceutical Discovery

Research Division, Takeda Chemical Industries Ltd, Osaka, Japan  
SOURCE: Neuroscience Research Supplement, (2000) No. 24, pp. S10.

print.  
Meeting Info.: 23rd Annual Meeting of the Japan Neuroscience Society and the 10th Annual Meeting of the Japanese Neural Network Society. Yokohama, Japan.  
September 04-06, 2000. Japan Neuroscience Society; Japanese Neural Network Society.  
ISSN: 0921-8696.

DOCUMENT TYPE: Conference; (Meeting)  
Conference; Abstract; (Meeting Abstract)  
LANGUAGE: English  
ENTRY DATE: Entered STN: 23 May 2001  
Last Updated on STN: 19 Feb 2002

L9 ANSWER 15 OF 18 MEDLINE on STN DUPLICATE  
6  
ACCESSION NUMBER: 1999233370 MEDLINE  
DOCUMENT NUMBER: 99233370 PubMed ID: 10218986

TITLE: Immunocytochemical localization of \*\*\*prolactin\*\*\* - \*\*\*releasing\*\*\* \*\*\*peptide\*\*\* in the rat brain.  
AUTHOR: Maruyama M; Matsumoto H; Fujiwara K; Kitada C; Hinuma S;

Onda H; Fujino M; Inoue K  
CORPORATE SOURCE: Department of Regulation Biology, Faculty of Science, Saitama University, Urawa, Japan.  
SOURCE: ENDOCRINOLOGY, (1999 May) 140 (5) 2326-33.  
Journal code: 0375040. ISSN: 0013-7227.

PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals  
ENTRY MONTH: 199905  
ENTRY DATE: Entered STN: 19990517  
Last Updated on STN: 19990517  
Entered Medline: 19990506

AB A hypothalamic peptide that stimulates PRL release has recently been found as a ligand of an orphan receptor and named PRL-releasing peptide (PrRP).

PrRP and its receptor were mainly detected in the hypothalamus and pituitary gland, respectively. Its characteristics suggested PrRP to be a novel hypophysiotropic peptide that stimulates the anterior pituitary PRL cell; however, this remained to be confirmed morphologically. We therefore performed an immunocytochemical study to locate PrRP in the rat brain using the region-specific monoclonal antibodies, P2L-1C and P2L-1T, which recognize the C-terminal and the internal sequence of PrRP, respectively. Our results clearly show that dense immunoreactive nerve fiber networks are present in the paraventricular hypothalamic nucleus, supraoptic nucleus, paraventricular thalamic nucleus, basolateral amygdaloid nucleus, and bed nucleus of the stria terminalis. A small number of PrRP nerve fibers was also observed in the neural lobe of the hypophysis. However, no immunopositive fiber was observed in the external region of the median eminence, which is known to be the release site of the classical hypophysiotropic hormones. Also, the distribution of PrRP was not changed during the estrous cycle. We therefore concluded that

PrRP probably differs from classical hypothalamic releasing hormones. We found the immunoreactive cell bodies to be mainly in the caudal portion of the dorsomedial hypothalamic nucleus and solitary nucleus. A double immunocytochemical procedure revealed that some PrRP-positive neurons showed synaptic contact with \*\*\*oxytocin\*\*\* -positive cell bodies in the paraventricular hypothalamic nucleus, which suggests that PrRP regulates the function of \*\*\*oxytocin\*\*\* neurons. This is the first report to demonstrate the localization of the novel hypothalamic peptide, PrRP, and we therefore suggest that it takes part in a variety of brain functions. However, it is not yet known how PrRP is transported to the pituitary gland, which is the site that contains the greatest concentration of receptors to this new peptide. Therefore, additional work will be required to resolve this discrepancy between ligand and receptor site location.

L9 ANSWER 16 OF 18 MEDLINE on STN DUPLICATE  
7  
ACCESSION NUMBER: 2000077885 MEDLINE  
DOCUMENT NUMBER: 20077885 PubMed ID: 10612638  
TITLE: Central administration of \*\*\*prolactin\*\*\* -  
\*\*\*releasing\*\*\* \*\*\*peptide\*\*\* stimulates  
\*\*\*oxytocin\*\*\* release in rats.  
AUTHOR: Maruyama M; Matsumoto H; Fujiwara K; Noguchi J;  
Kitada C;  
Hinuma S; Onda H; Nishimura O; Fujino M; Higuchi T; Inoue  
K  
CORPORATE SOURCE: Department of Regulation Biology, Faculty of  
Science,  
Saitama University, Urawa, Japan.  
SOURCE: NEUROSCIENCE LETTERS, (1999 Dec 10) 276 (3)  
193-6.  
Journal code: 7600130. ISSN: 0304-3940.  
PUB. COUNTRY: Ireland  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 200001  
ENTRY DATE: Entered STN: 20000114  
Last Updated on STN: 20000114  
Entered Medline: 20000105

AB The \*\*\*prolactin\*\*\* - \*\*\*releasing\*\*\* \*\*\*peptide\*\*\* (PrRP)  
is a  
novel hypothalamic peptide that has been purified as a ligand of an  
orphan  
receptor which is expressed in pituitary cells, and is known to stimulate  
prolactin release both in vitro and in vivo. We previously determined  
the  
immunocytochemical localization of PrRP neurons in the rat brain and  
our  
results suggest that PrRP takes part in a variety of brain functions.  
Additionally, in rats we have demonstrated the synaptic contact of PrRP  
neurons with \*\*\*oxytocin\*\*\* cell bodies in the paraventricular  
hypothalamic nucleus (PVH) and supraoptic nucleus (SON). This  
observation  
indicates that PrRP may regulate \*\*\*oxytocin\*\*\* secretion. In the  
present study, we performed intra-cerebroventricular administration of  
PrRP to conscious rats, and examined the effect of PrRP on the plasma  
levels of \*\*\*oxytocin\*\*\* and vasopressin. Our results show that  
central administration of PrRP increased the plasma \*\*\*oxytocin\*\*\*  
and  
vasopressin levels in female rats, but in male rats only \*\*\*oxytocin\*\*\*  
was increased. These results suggest that the PrRP acts as a  
neuro-modulator of the function of magnocellular neurons, especially  
\*\*\*oxytocin\*\*\* neurons, in the brain.

L9 ANSWER 17 OF 18 SCISEARCH COPYRIGHT 2004 THOMSON  
ISI on STN  
ACCESSION NUMBER: 1999:155509 SCISEARCH  
THE GENUINE ARTICLE: 166WD  
TITLE: Gender-biased activity of the novel \*\*\*prolactin\*\*\*  
\*\*\*releasing\*\*\* \*\*\*peptides\*\*\* - Comparison with  
thyrotropin releasing hormone reveals only pharmacologic  
effects  
AUTHOR: Samson W K (Reprint); Resch Z T; Murphy T C;  
Chang J K  
CORPORATE SOURCE: UNIV N DAKOTA, SCH MED, DEPT  
PHYSIOL, 501 N COLUMBIA RD,  
GRAND FORKS, ND 58202 (Reprint); PHOENIX  
PHARMACEUT INC,  
MT VIEW, CA  
COUNTRY OF AUTHOR: USA  
SOURCE: ENDOCRINE, (DEC 1998) Vol. 9, No. 3, pp.  
289-291.  
Publisher: HUMANA PRESS INC, 999 RIVERVIEW  
DRIVE SUITE  
208, TOTOWA, NJ 07512.  
ISSN: 0969-711X.  
DOCUMENT TYPE: Article; Journal  
FILE SEGMENT: LIFE  
LANGUAGE: English  
REFERENCE COUNT: 12  
\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL  
FORMATS\*

AB The prolactin- (PRL) releasing activities of the newly described  
PRL-releasing peptides (PrRPs) were compared to that of  
thyrotropin-releasing hormone (TRH) in dispersed, rat anterior pituitary  
cell cultures. A dose-related stimulation of PRL release by TRH was  
observed in cells harvested from both intact male and random cycle  
female  
pituitary donors. The minimum effective dose of TRH ranged from 1 to  
10  
nM. Neither PrRP-20 nor PrRP-31 significantly altered PRL secretion  
in  
cells from male donors even at doses as high as 1  $\mu$ M in cells

harvested  
from females, only the highest doses of PrRP-20 and PrRP-31 tested  
(0.1  
and 1.0  $\mu$ M) significantly stimulated PRL secretion. The  
PRL-releasing  
action of TRH was observed already at 15 min of incubation, whereas  
those  
of PrRP-20 and PrRP-31 appeared only after 1 and 2 h of incubation,  
and  
the magnitude of PRL release in the presence of 1  $\mu$ M PrRPs was  
significantly less than that of a similar dose of TRH. These data do not  
suggest a physiologically relevant role for the PrRPs in the  
neuroendocrine regulation of PRL secretion in intact male and  
nonlactating, random-cycle female rats.

L9 ANSWER 18 OF 18 BIOSIS COPYRIGHT 2004 BIOLOGICAL  
ABSTRACTS INC. on STN  
ACCESSION NUMBER: 2003:246561 BIOSIS  
DOCUMENT NUMBER: PREV200300246561  
TITLE: \*\*\*Prolactin\*\*\* \*\*\*releasing\*\*\* \*\*\*peptides\*\*\*  
modulate background firing rate and bursting firing of  
\*\*\*oxytocin\*\*\* cells.  
AUTHOR(S): Honda, Kazumasa [Reprint Author]; Narita, Kazumi  
[Reprint  
Author]; Murata, Takuya [Reprint Author]; Higuchi, Takashi  
[Reprint Author]; Kitada, Chieko  
CORPORATE SOURCE: Dept. of Physiol., Fukui Medical Univ.,  
Matsuoka, Japan  
SOURCE: Neuroscience Research Supplement, (2002 (2003)) No.  
26, pp.

S42. print.  
Meeting Info.: 25th Annual Meeting of the Japan  
Neuroscience Society. Tokyo, Japan. July 07, 2002-July 09,  
2003. Japan Neuroscience Society.  
ISSN: 0921-8696 (ISSN print).  
DOCUMENT TYPE: Conference; (Meeting)  
Conference; Abstract; (Meeting Abstract)  
LANGUAGE: English  
ENTRY DATE: Entered STN: 21 May 2003  
Last Updated on STN: 21 May 2003



109712

**From:** Chan, Christina  
**Sent:** Wednesday, December 03, 2003 3:17 PM  
**T :** Basi, Nirmal; STIC-Biotech/ChemLib  
**Subject:** RE: Rush sequence search for App #09/868,885

**Pl ase rush. Thanks Chris**

*Chris Chan*

TC 1600 New Hire Training Coordinator and SPE 1644  
 308-3973  
 CM-1, 9B19

RECEIVED  
 DEC - 3 2003  
 STIC

-----Original Message-----

**Fr m:** Basi, Nirmal  
**Sent:** Wednesday, December 03, 2003 3:15 PM  
**To:** Chan, Christina  
**Subject:** Rush sequence search for App #09/868,885

Christina I am seeking approval for a RUSH sequence search, as indicated below. If approved, could you please forward the search to STIC and cc a copy to me.

Sequence search -  
 App. #: 09/868,885  
 Result format: Paper.  
 Title: Use of peptides  
 Inventors: matsumoto et al  
 Priority Date 12/22/99

Please search:  
 i) SEQ ID NO: 44, 3, 18, 32

Search commercial and issued database.

Thanks,  
 Nirmal S. Basi

Searcher: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Location: \_\_\_\_\_  
 Date Picked Up: \_\_\_\_\_  
 Date Completed: \_\_\_\_\_  
 Searcher Prep/Review: \_\_\_\_\_  
 Clerical: \_\_\_\_\_  
 Online time: \_\_\_\_\_

TYPE OF SEARCH:  
 NA Sequences: \_\_\_\_\_  
 AA Sequences: \_\_\_\_\_  
 Structures: \_\_\_\_\_  
 Bibliographic: \_\_\_\_\_  
 Litigation: \_\_\_\_\_  
 Full text: \_\_\_\_\_  
 Patent Family: \_\_\_\_\_  
 Other: \_\_\_\_\_

VENDOR/COST (where applic.)  
 STN: \_\_\_\_\_  
 DIALOG: \_\_\_\_\_  
 Questel/Orbit: \_\_\_\_\_  
 DRLink: \_\_\_\_\_  
 Lexis/Nexis: \_\_\_\_\_  
 Sequence Sys.: \_\_\_\_\_  
 WWW/Internet: \_\_\_\_\_  
 Other (specify): \_\_\_\_\_